What Is Claimed Is:

1	1. A method for manipulating a window within a three-dimensional	
2	(3D) display model, comprising:	
3	displaying a view into the 3D display model through a two-dimensional	
4	(2D) display;	
5	receiving a command to manipulate the window within the 3D display	
6	model, wherein the window provides a 2D user interface for a 2D application; and	
7	in response to the command, manipulating the window within the 3D	
8	display model so that the manipulation is visible within the 2D display.	
1	2. The method of claim 1, wherein if the command moves the	
2	window in close proximity to an edge of the 2D display, the method further	
3	comprises tilting the window so that the window appears at an oblique angle in	
4	the 2D display, whereby the contents of the window remain visible, while the	
5	window occupies less space in the 2D display and is less likely to overlap other	
6	windows.	
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1	3. The method of claim 2, wherein if the window is selected, the	
2	method further comprises untilting the window so that the window is parallel with	
3	the 2D display.	
1	4. The method of claim 1, wherein if the command rotates the	
2	window so that the backside of the window is visible, the method further	
3	comprises displaying information associated with the 2D application on the	
4	backside of the window.	

1	5. The method of claim 4, wherein the information associated with
2	the 2D application can include:
3	application version information;
4	application settings;
5	application parameters;
6	application properties; and
7	notes associated with a file or a web page that is displayed in the window.
1	6. The method of claim 4, wherein the backside of the window can
2	accept user input, including change settings, parameters, properties and/or notes.
1	7. The method of claim 1, wherein if the command is to minimize the
2	window, manipulating the window involves:
3	tilting the window so that a spine located on a side edge of the window is
4	visible and the contents of the window remains visible, wherein the spine contains
5	identification information for the window; and
6	moving the minimized window to an edge of the 2D display;
7	wherein the operations of turning and moving the window are animated as
8	a continuous motion.
1	8. The method of claim 1, further comprising:
2	receiving a predefined gesture through a pointing device, and
3	in response to the predefined gesture, minimizing a top-level window in
4	the 2D display, whereby repeating the predefined gesture causes subsequent top-
5	level windows to be minimized.

1	9.	The method of claim 8, wherein upon receiving a window
2		mmand, the method further comprises restoring minimized windows
3	to their expan	· · · · · · · · · · · · · · · · · · ·
3	to their expan	aca state.
1	10.	The method of claim 1, wherein if the command is entered through
2	a pointing dev	vice and the command throws the window by moving the window
3		eleasing it, the method further comprises throwing the window by
4	moving the window in a continuous animated motion.	
1	11.	The method of claim 10, wherein throwing the window can
2	involve:	a control of the reion moints
3		ng the window farther from the viewpoint;
4		ng down the size of the window;
5	iconi	zing the window; and
6	delet	ing the window.
1	12.	The method of claim 1, wherein receiving the command involves:
2	rotat	ing the window so that window controls on the edge of the window
3	become visi	ble in response to a cursor moving close to an edge of a window;
4	recei	iving the command through a window control; and
5	rotat	ing the window back to its original orientation.
1	13.	A computer-readable storage medium storing instructions that
2	when execu	ited by a computer cause the computer to perform a method for
3	manipulatir	ng a window within a three-dimensional (3D) display model, the
4	method cor	
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5	displaying a view into the 3D display model through a two-dimensional
6	(2D) display;
7	receiving a command to manipulate the window within the 3D display
8	model, wherein the window provides a 2D user interface for a 2D application; and
9	in response to the command, manipulating the window within the 3D
10	display model so that the manipulation is visible within the 2D display.
1	14. The computer-readable storage medium of claim 13, wherein if the
2	command moves the window in close proximity to an edge of the 2D display, the
3	method further comprises tilting the window so that the window appears at an
4	oblique angle in the 2D display, whereby the contents of the window remain
5	visible, while the window occupies less space in the 2D display and is less likely
6	to overlap other windows.
1	15. The computer-readable storage medium of claim 14, wherein if the
2	window is selected, the method further comprises untilting the window so that the
3	window is parallel with the 2D display.
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1	16. The computer-readable storage medium of claim 13, wherein if the
2	command rotates the window so that the backside of the window is visible, the
3	method further comprises displaying information associated with the 2D
4	application on the backside of the window.
	The started modium of claim 16, wherein the
1	17. The computer-readable storage medium of claim 16, wherein the
2	information associated with the 2D application can include:
3	application version information;
4	application settings;

,	application parameters;	
5	application properties; and	
7	notes associated with a file or a web page that is displayed in the window.	
i	18. The computer-readable storage medium of claim 16, wherein the	
2	backside of the window can accept user input, including change settings,	
3	parameters, properties and/or notes.	
1	19. The computer-readable storage medium of claim 13, wherein if the	3
2	command is to minimize the window, manipulating the window involves:	
3	tilting the window so that a spine located on a side edge of the window is	
4	visible and the contents of the window remains visible, wherein the spine contain	S
5	identification information for the window; and	
6	moving the minimized window to an edge of the 2D display;	
7	wherein the operations of turning and moving the window are animated a	S
8	a continuous motion.	
1	20. The computer-readable storage medium of claim 13, wherein the	
2	method further comprises:	
3	receiving a predefined gesture through a pointing device, and	
4	in response to the predefined gesture, minimizing a top-level window in	
5	the 2D display, whereby repeating the predefined gesture causes subsequent top-	
6	level windows to be minimized.	
1	21. The computer-readable storage medium of claim 20, wherein upon	
2	receiving a window restoration command, the method further comprises restorir	ıg
3	minimized windows to their expanded state.	

1	22. The computer-readable storage medium of claim 13, wherein if the
2	command is entered through a pointing device and the command throws the
3	window by moving the window quickly and releasing it, the method further
4	comprises throwing the window by moving the window in a continuous animated
5	motion.
1	23. The computer-readable storage medium of claim 22, wherein
2	throwing the window can involve:
3	locating the window farther from the viewpoint;
4	scaling down the size of the window;
5	iconizing the window; and
6	deleting the window.
1	24. The computer-readable storage medium of claim 13, wherein
2	receiving the command involves:
3	rotating the window so that window controls on the edge of the window
4	become visible in response to a cursor moving close to an edge of a window;
5	receiving the command through a window control; and
6	rotating the window back to its original orientation.
1	25. An apparatus that manipulates a window within a three-
2	dimensional (3D) display model, comprising:
3	a two-dimensional (2D) display configured to display a view into the 3D
4	display model;

5	a window manipulation mechanism configured to receive a command to
6	manipulate the window within the 3D display model, wherein the window
7	provides a 2D user interface for a 2D application; and
8	wherein in response to the command, the window manipulation
9	mechanism is configured to manipulate the window within the 3D display model
10	so that the manipulation is visible within the 2D display.
1	26. The apparatus of claim 25, wherein if the command moves the
2	window in close proximity to an edge of the 2D display, the window manipulation
3	mechanism is configured to tilt the window so that the window appears at an
4	oblique angle in the 2D display, whereby the contents of the window remain
5	visible, while the window occupies less space in the 2D display and is less likely
6	to overlap other windows.
1	27. The apparatus of claim 26, wherein if the window is selected, the
2	window manipulation mechanism is configured to untilt the window so that the
3	window is parallel with the 2D display.
1	28. The apparatus of claim 25, wherein if the command rotates the
2	window so that the backside of the window is visible, the window manipulation
3	mechanism is configured to display information associated with the 2D
4	application on the backside of the window.
1	29. The apparatus of claim 28, wherein the information associated with
2	the 2D application can include:
3	application version information;
	application settings;
4	application settings,

5	application parameters;
5	application properties; and
7	notes associated with a file or a web page that is displayed in the window.
1	30. The apparatus of claim 28, wherein the backside of the window can
2	accept user input, including change settings, parameters, properties and/or notes.
1	The apparatus of claim 25, wherein if the command is to minimize
2	the window, the window manipulation mechanism is configured to:
3	tilt the window so that a spine located on a side edge of the window is
4	visible and the contents of the window remains visible, wherein the spine contains
5	identification information for the window; and to
6	move the minimized window to an edge of the 2D display;
7	wherein the operations of turning and moving the window are animated as
8	a continuous motion.
1	The apparatus of claim 25, wherein the window manipulation
2	mechanism is additionally configured to:
3	receive a predefined gesture through a pointing device, and
4	in response to the predefined gesture, to minimize a top-level window in
5	the 2D display, whereby repeating the predefined gesture causes subsequent top-
6	level windows to be minimized.
1	33. The apparatus of claim 32, wherein upon receiving a window
2	restoration command, the window manipulation mechanism is configured to
3	restore minimized windows to their expanded state.

1	34. The apparatus of claim 25, wherein if the command is entered
2	through a pointing device and the command throws the window by moving the
3	window quickly and releasing it, the window manipulation mechanism is
4	configured to throw the window by moving the window in a continuous animated
5	motion.
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1	35. The apparatus of claim 34, wherein throwing the window can
2	involve:
3	locating the window farther from the viewpoint;
4	scaling down the size of the window;
5	iconizing the window; and
6	deleting the window.
1	36. The apparatus of claim 25, wherein while receiving the command,
2	the window manipulation mechanism is configured to:
3	rotate the window so that window controls on the edge of the window
4	become visible in response to a cursor moving close to an edge of a window;
5	receive the command through a window control; and to
6	rotate the window back to its original orientation.
1	37. A means for manipulating a window within a three-dimensional
2	(3D) display model, comprising:
3	a two-dimensional (2D) display means for displaying a view into the 3D
4	display model;
5	a window manipulation means configured to receive a command to
6	manipulate the window within the 3D display model, wherein the window
7	provides a 2D user interface for a 2D application; and
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- 8 wherein in response to the command, the window manipulation means
- 9 manipulates the window within the 3D display model so that the manipulation is
- visible within the 2D display.